

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF
ANNE FLISHER ET AL
DIVISIONAL OF APPLICATION NO: 09/890,129
FILED CONCURRENTLY HEREWITH
FOR: POLYMERISATION PROCESS

Group Art Unit: 1711
Examiner: S. Berman

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

In accordance with 37 CFR 1.56, Applicants wish to call the Examiner's attention to the references cited on the attached form PTO-1449.

DE 4123889 and its English language abstract are enclosed herewith.

The Examiner is requested to consider the foregoing information in relation to this application and indicate that each reference was considered by returning a copy of the initialed PTO 1449 form.

Respectfully submitted,



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Encl. References
PTO-1449 Form

92-089567/12	A35 D22 (A18 A25 A93 A96)	SANN 07.09.90	A(9-A, 10-E10, 10-G1A, 12-V3A; D(9-C4B)
SANYO CHEM IND LTD	07.09.90-JP-238514 (1.2.03.92) C08f-02/38 C08f-06 C08f-251	*DE 4123-889-A	
C08f-291 C08j-03/28			
Water-absorbing resin prepn. - by irradiating polymer of water-soluble monomer and polysaccharide and/or crosslinking agent with UV in presence of radical scavenger C92-041254			
<p>The prepn. of water-absorbing resins (1) with reduced content of residual monomer and water-soluble components comprises irradiating (1), obt'd. by polymsg. a water-soluble monomer with a polysaccharide and/or crosslinking agent, with UV-radiation in the presence of a radical scavenger in every drying or pulverising stage after polymsn..</p> <p>Also claimed are (1) comprising 500 ppm or less residual monomer and 7 wt.% or less water-soluble components.</p>			
<p>USE/ADVANTAGE</p> <p>(1) contain reduced amts. of residual monomer and water-soluble components. (1) are used in prods. in contact with the human body, e.g. fluid-absorbing pads for sanitary prods. and bandages.</p>			
<p>MORE SPECIFICALLY</p> <p>The amt. of radical scavengers used is 0.001-5% of the total wt. of polymerisable monomer and crosslinking agent.</p>			
<p>EXAMPLE</p> <p>196g Acrylic acid, 0.05g methylenebisacrylamide and 236g deionised water were mixed together and 168g sq. soln. contg. 48% NaOH was added gradually, keeping the temp. under 50°C, to neutralise approx. 74 mol.% of the acrylic acid. The concn. of the dissolved oxygen was reduced to 1 ppm or less by adding nitrogen. 0.05g V-50 (RTM; azo-type polymsn. initiator) was added to the soln. and mixed for 1min.</p> <p>The resulting soln. was poured into a steel container contg. oxygen sealed with polyethane film and polymsd. for 1 hr. in a water bath at 50°C to produce a hydrogel polymer. An sq. soln. (prepd. by dissolving 0.72g hydroquinone in 14g water) was sprayed evenly over the surface of 600g of the polymer.</p> <p>The gel was placed on a conveyor belt and irradiated for 10 sec. with UV-radiation (80 W/cm). The gel was granulated and dried at 130°C in air. The dried polymer was reduced to less than 20 mesh.</p> <p>The residual monomer content was 230 ppm, the water-soluble component content was 3.6% and the water absorption was 62 g/g. (9pp2223MODwgNo0/0). DE4123889-1</p>			